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- 30. An isolated polymercleotide encoding a polypeptide of Claim 29 or the full complement to the isolated polynucleotide.
- 31. The isolated polypeptide of claim 25, wherein the immunogenic fragment of (b) comprises at least 20 amino acids.
- The isolated polypeptide of claim 25, wherein the amino acid sequence of (a) is according to SEQ ID NO:2.
- 33. An isolated polynucleotide encoding the polypeptide of Claim 32 or the full complement to the isolated polynucleotide.
- 34. A process for expressing the polynucleotide of Claim 33 comprising transforming a host cell with an expression vector comprising the polynucleotide and culturing the host cell under conditions sufficient for expression of the polynucleotide.
- 35. The isolated polypeptide of claim 25, wherein the amino acid sequence of (a) is according to SEQ ID NO:4.
- 36. An isolated polynucleotide encoding the polypeptide of Claim 35 or the full complement to the isolated polynucleotide.
- 37. A process for expressing the polynucleotide of Claim 36 comprising transforming a host cell with an expression vector comprising the polynucleotide and culturing the host cell under conditions sufficient for expression of the polynucleotide.
- 38. A fusion protein comprising the isolated polypeptide of Claim 25.
- 39. An isolated polynucleotide comprising the polynucleotide of one of SEQ ID NOs:1 or 3.
- 40. An isolated polynucleotide segment comprising a polynucleotide sequence or the full complement of the entire length of the polynucleotide sequence, wherein the polynucleotide

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sequence hybridizes to the full complement of SEQ ID NO:3 minus the complement of any stop codon, wherein the hybridization conditions include incubation at 42°C in a solution comprising: 50% formamide, 5x SSC (150mM NaCl, 15mM trisodium citrate), 50 mM sodium phosphate (pH 7.6), 5x Denhardt's solution, 10% dextran sulfate, and 20 micrograms/ml denatured, sheared salmon sperm DNA, followed by washing in 0.1x SSC at 65°C; and, wherein the polynucleotide sequence is identical to SEQ ID NO:3 minus any terminal stop codon, except that, over the entire length corresponding to SEQ ID NO:3 minus any terminal stop codon, \mathbf{n}_n nucleotides are substituted, inserted or deleted, wherein \mathbf{n}_n satisfies the following expression

$$n_n \leq x_n - (x_n \bullet y)$$

wherein \mathbf{x}_n is the total number of nucleotides in SEQ ID NO:3 minus any terminal stop codon, \mathbf{y} is at least 0.95, and wherein any non-integer product of \mathbf{x}_n and \mathbf{y} is rounded down to the nearest integer before subtracting the product from \mathbf{x}_n , and wherein the polynucleotide sequence detects Neisseria meningitidis.

- 41. An expression vector comprising the isolated polynucleotide of Claim 26.
- 42. A host cell transformed with the expression vector of Claim 41.
- 43. A vaccine comprising the polypeptide of Claim 25 and a pharmaceutically acceptable carrier.
- 44. The vaccine of Claim 43, wherein the vaccine comprises at least one other *Neisseria* meningitidis antigen.
- 45. An antibody immunospecific for the polypeptide or immunogenic fragment of Claim
- 46. A method for inducing an immune response in a mammal comprising administration of the polypeptide of Claim 25.